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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,161	03/17/2004	Hans Groeblacher	2309.2007-000	4140

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EXAMINER	
LEYSON, JOSEPH S	
ART UNIT	PAPER NUMBER
1722	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/803,161	GROEBLACHER ET AL.	
	Examiner	Art Unit	
	Joseph Leyson	1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 January 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,6-8 and 11-13* is/are pending in the application.

4a) Of the above claim(s) *13* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,6-8,11 and 12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This application has been transferred to Examiner Joseph Leyson in Art Unit 1722.

Election/Restrictions

2. Applicant's election of Group I (i.e., apparatus claims) in the reply filed on May 19, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

3. Claim 13 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on May 19, 2006, as mentioned above.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, 2, 6-8, 11 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites an annular shoulder extending into a groove adjacent the flange, the groove being configured to allow movement of the outer die portion relative to the outer member. Claim 8 recites an annular shoulder extending into a groove adjacent the flange, the groove being configured to allow movement of the outer die portion relative to the retaining ring. However, such subject matter is NEW MATTER. The disclosure, as originally filed, does not disclose any grooves which perform the functionality recited above. As understood from the original specification (p. 4, lines 24-25), the diameters of the bore 30 and the opening 19 are sized to allow some lateral movement of the flange 28 and outer die portion 22 (relative to the retaining ring 18). Note that there is no mention of any grooves at all.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 2, 6-8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dukert et al. (U.S. Patent 5,908,642) in view of Huang et al. (U.S. 5,756,016).

Dukert et al. (U.S. Patent 5,908,642) disclose an extrusion die for making a hollow profile (i.e., figs. 1-6) including an inner die portion 74, 76 having a male form having a male shape, an outer die portion 88 having a female form having a female shape, the female shape surrounding and being separated from the male shape by a gap (i.e., fig. 1), flowable material capable of being extruded through the gap between the male and female shapes to form the hollow profile, and an adjustment mechanism including an outer member (i.e., retaining ring 90) surrounding the outer die portion 88, and a plurality of adjustment screws 96 threaded through the outer member 90 and engaging a flange 94 extending from the outer die portion 88 at angular locations and configured to provide controlled incremental linear and rotational adjustment of the female shape relative to the male shape for adjusting the gap and for adjusting the position and orientation of the male and female shapes relative to each other, the outer member 90 having an annular shoulder (see fig. 1) with an opening through which the outer die portion 88 passes, the annular shoulder capturing the flange 94 extending from the outer die portion 88 and extending into a groove adjacent to the flange (see fig. 1; the annular surface upon which heating band 98 is located defines a groove relative to the flange 94), the annular shoulder and groove being configured to allow movement

of the outer die portion 88 relative to the outer member 90. The male shape of the inner die portion 74, 76 is surrounded by the female shape of the outer die portion 88 on all sides (i.e., the gap produces an annular product; col. 4, lines 70-74). The inner die portion 74, 76 is fixed within a spider pipe 10, 48. The outer member 90 secures the outer die portion 88 to the spider pipe 10, 48, the adjustment screws 96 being threaded radially inwardly through the outer member 90 to engage the outer die portion 88. However, Dukert et al. (U.S. Patent 5,908,642) does not disclose the male and female form having complex shapes as recited by the instant claims, or the adjustment screws being at equidistant angular locations or being at least eight in number.

Huang et al. (U.S. 5,756,016) discloses a extrusion die (i.e., figs. 6 and 7) for extruding a complex shape product, the die including an inner die portion 112 having a male form, he male form having a male complex shape with peaks and valleys, an outer die portion 114 having a female form, the female form having a female complex shape with peaks and valleys which correspond to the male complex shape of the male form, the female complex shape surrounding and being separated from the male complex shape by a gap 122.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the extrusion die of Dukert et al. (U.S. Patent 5,908,642) such that the male and female form have complex shapes with peaks and valleys which correspond to each other because it is notoriously well known and conventional in the art to vary the shape of the die gap to obtain desired product shapes and/or because such complex shapes are well known and conventional in the art, as disclosed by

Huang et al. (U.S. 5,756,016), and would enable the die of Dukert et al. (U.S. Patent 5,908,642) to provide a product having a complex shape; and to modify the adjustment screws of Dukert et al. (U.S. Patent 5,908,642) to be at equidistant angular locations and to be at least eight in number because such adjustment screw modifications would have been found due to routine engineering or experimentation in finding the operable or optimum position and number of screws which enable centering of the outer die portion relative to the inner die portion to obtain uniform profile thickness in view of the teachings of Dukert et al. (U.S. Patent 5,908,642: col. 4, lines 70-74) who disclose a plurality of circumferentially spaced adjustment screws (i.e., two or more adjustment screws at various angular positions) to enable such centering to obtain uniform profile thickness.

9. Claims 1, 2, 6-8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dukert et al. (U.S. Patent 5,908,642) in view of Huang et al. (U.S. 5,756,016) and Stewart (U.S. Patent 3,461,501).

If applicants do not agree that the number and position of the adjustment screws are obvious in view of the teachings of Dukert et al. (U.S. Patent 5,908,642), this rejection is further put forward.

Dukert et al. (U.S. Patent 5,908,642) and Huang et al. (U.S. 5,756,016) are applied as above.

Stewart (U.S. Patent 3,461,501) discloses an extrusion die for making a hollow profile including an inner die portion 1 or 1' having a male form having a male shape, an outer die portion 2 or 2' having a female form having a female shape, the female shape

surrounding and being separated from the male shape by a gap 7 or 7', flowable material capable of being extruded through the gap between the male and female shapes to form the hollow profile, and an adjustment mechanism including an outer member (i.e., ring 3 or 3') surrounding the outer die portion 2 or 2', and a plurality of adjustment screws 5 or 5' threaded through the outer member 3 or 3' and engaging the outer die portion 2 or 2' at equidistant angular locations (i.e., figs. 1 or 2) and configured to provide controlled incremental linear and rotational adjustment of the female shape relative to the male shape for adjusting the gap 7 or 7' and for adjusting the position and orientation of the male and female shapes relative to each other, the number of adjustment screws 5 or 5' being 8 (fig. 1) or more (fig. 2).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the extrusion die of Dukert et al. (U.S. Patent 5,908,642) such that the male and female form have complex shapes with peaks and valleys which correspond to each other because it is notoriously well known and conventional in the art to vary the shape of the die gap to obtain desired product shapes and/or because such complex shapes are well known and conventional in the art, as disclosed by Huang et al. (U.S. 5,756,016), and would enable the die of Dukert et al. (U.S. Patent 5,908,642) to provide a product having a complex shape; and to modify the adjustment screws of Dukert et al. (U.S. Patent 5,908,642) to be at equidistant angular locations and to be at least eight in number because such adjustment screw modifications are well known and conventional in the art, as disclosed by Stewart (U.S. Patent 3,461,501)

and would provide an alternative adjustment screw configuration known to be operable in the art for positioning the outer die portion relative to the inner die portion.

10. Claims 1, 2, 6-8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dukert et al. (U.S. Patent 5,908,642) in view of Huang et al. (U.S. 5,756,016) and Mehnert (U.S. Patent 3,535,739).

If applicants do not agree that Dukert et al. (U.S. Patent 5,908,642) discloses a groove as mentioned above, this rejection is further put forward.

Dukert et al. (U.S. Patent 5,908,642) and Huang et al. (U.S. 5,756,016) are applied as above.

Mehnert (U.S. Patent 3,535,739) discloses an extrusion die for making a hollow profile (i.e., figs. 1-6) including an inner die portion 21, 22 having a male form having a male shape, an outer die portion 25 having a female form having a female shape, the female shape surrounding and being separated from the male shape by a gap 18, flowable material capable of being extruded through the gap between the male and female shapes to form the hollow profile, and an adjustment mechanism including an outer member (i.e., retaining ring 7) surrounding the outer die portion 88, and a plurality of adjustment screws 27 threaded through the outer member 7 and engaging the outer die portion 25 at equidistant angular locations and configured to provide controlled incremental linear and rotational adjustment of the female shape relative to the male shape for adjusting the gap and for adjusting the position and orientation of the male and female shapes relative to each other, the outer member 7 having an annular shoulder (see fig. 1) with an opening through which the outer die portion 25 passes, the

annular shoulder capturing a flange 24 extending from the outer die portion 25 and extending into a groove 23 adjacent to the flange 24, the annular shoulder and groove being configured to allow movement of the outer die portion 25 relative to the outer member 7. The groove 23 allows some flexing of the lower portion of the outer die portion 25 to modify the gap 18 (i.e., col. 5, lines 24-44).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the extrusion die of Dukert et al. (U.S. Patent 5,908,642) such that the male and female form have complex shapes with peaks and valleys which correspond to each other because it is notoriously well known and conventional in the art to vary the shape of the die gap to obtain desired product shapes and/or because such complex shapes are well known and conventional in the art, as disclosed by Huang et al. (U.S. 5,756,016), and would enable the die of Dukert et al. (U.S. Patent 5,908,642) to provide a product having a complex shape; to modify the outer die portion of Dukert et al. (U.S. Patent 5,908,642) to have a groove as disclosed by Mehnert (U.S. Patent 3,535,739) because such a modification would enable some flexing of the lower portion of the outer die portion to modify the gap; and to modify the adjustment screws of Dukert et al. (U.S. Patent 5,908,642) to be at equidistant angular locations and to be at least eight in number because such adjustment screw modifications would have been found due to routine engineering or experimentation in finding the operable or optimum position and number of screws which enable centering of the outer die portion relative to the inner die portion to obtain uniform profile thickness in view of the teachings of Dukert et al. (U.S. Patent 5,908,642: col. 4, lines 70-74) who disclose a plurality of

circumferentially spaced adjustment screws (i.e., two or more adjustment screws at various angular positions) to enable such centering to obtain uniform profile thickness.

11. Claims 1, 2, 6-8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dukert et al. (U.S. Patent 5,908,642) in view of Huang et al. (U.S. 5,756,016), Stewart (U.S. Patent 3,461,501) and Mehnert (U.S. Patent 3,535,739).

If applicants do not agree that Dukert et al. (U.S. Patent 5,908,642) discloses a groove as mentioned above, and that the number and position of the adjustment screws are obvious in view of the teachings of Dukert et al. (U.S. Patent 5,908,642), this rejection is further put forward.

Dukert et al. (U.S. Patent 5,908,642), Huang et al. (U.S. 5,756,016), Stewart (U.S. Patent 3,461,501) and Mehnert (U.S. Patent 3,535,739) are applied as above.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the extrusion die of Dukert et al. (U.S. Patent 5,908,642) such that the male and female form have complex shapes with peaks and valleys which correspond to each other because it is notoriously well known and conventional in the art to vary the shape of the die gap to obtain desired product shapes and/or because such complex shapes are well known and conventional in the art, as disclosed by Huang et al. (U.S. 5,756,016), and would enable the die of Dukert et al. (U.S. Patent 5,908,642) to provide a product having a complex shape; to modify the outer die portion of Dukert et al. (U.S. Patent 5,908,642) to have a groove as disclosed by Mehnert (U.S. Patent 3,535,739) because such a modification would enable some flexing of the lower portion of the outer die portion to modify the gap; and to modify the adjustment screws

of Dukert et al. (U.S. Patent 5,908,642) to be at equidistant angular locations and to be at least eight in number because such adjustment screw modifications are well known and conventional in the art, as disclosed by Stewart (U.S. Patent 3,461,501) and would provide an alternative adjustment screw configuration known to be operable in the art for positioning the outer die portion relative to the inner die portion.

Response to Arguments

12. Applicant's arguments with respect to the instant claims have been considered but are moot in view of the new ground(s) of rejection.

Applicants argue that support for the "groove" in the amendments filed on December 5, 2006 are found at least in Fig. 1, as well as on p. 4, lines 19-27 of the original specification. The examiner respectfully disagrees. The original specification at p. 4, lines 19-27 makes no mention of a "groove". Only opening 19 is disclosed. Figure 1 (replacement sheet) appears to show cut outs. However, without further drawings clearly showing such cut outs and/or without any written disclosure about such cut outs, the structure and function of such cut outs cannot be ascertained. Note that fig. 1, as originally filed, shows even less clarity relative to the cut outs, which further adds argument that the "groove" is NEW MATTER.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Waltman (U.S. Patent 3,649,148) and Veen et al. (U.S. Patent 5,908,642) are cited as of interest to show the state of the art.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Leyson whose telephone number is (571) 272-5061. The examiner can normally be reached on M-F 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gupta Yogendra can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JL

ROBERT DAVIS
PRIMARY EXAMINER
GROUP ~~1300~~ 1700

3/27/07